



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,234	11/19/2001	Avi J. Ashkenazi	P1007P1D1	1337
9157	7590	10/07/2003	EXAMINER	
GENENTECH, INC. 1 DNA WAY SOUTH SAN FRANCISCO, CA 94080			NICKOL, GARY B	
			ART UNIT	PAPER NUMBER
			1642	
			DATE MAILED: 10/07/2003	

10

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/993,234

Applicant(s)

ASHKENAZI, AVI J.

Examiner

Gary B. Nickol Ph.D.

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-39 and 46-94 is/are pending in the application.
- 4a) Of the above claim(s) 35 and 46-94 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34 and 36-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The response filed on July 17, 2003 (Paper No. 9) to the restriction requirement of March 26, 2003 has been received. Applicant has elected the species corresponding to nucleic acids encoding amino acids 25-198 of SEQ ID NO:6. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP 818.03(a)).

Claims 34-39, and 46-94 are pending.

Claims 35, 46-94 are withdrawn from further consideration by the examiner under 37 CFR 1.142(b), as being drawn to a non-elected invention. (It is noted that applicant believes that pending claims 34, 36-39, and 91-94 are readable on the elected invention—see Paper No. 9, page 2. However, nowhere do claims 91-94 recite nucleic acids encoding amino acids 25-198. Thus, claims 91-94 are withdrawn from consideration.)

Claims 34, and 36-39 are pending and are currently under examination.

### ***Priority***

A review of the parent applications (08/828,683; 08/625,328; 08/710,802) revealed priority to application No. 08/710,802 filed 09/23/1996. If applicant disagrees with any rejection of claims 34, 36-39 set forth in this office action based on examiner's establishment of a priority date of **September 23, 1996** for the instant claims in application serial number 09/993,234, applicant is invited to submit evidence pointing to the serial number, page and line where support can be found establishing an earlier priority date.

***Information Disclosure Statement***

References 210-233, and 235 are improperly cited and will not be printed for publication because they lack publication dates. See 37 CFR 1.98 (b) (5).

***Specification***

The attempt to update the priority status of the present application as set forth in the preliminary amendment of Paper No. 6 is incomplete. Applicants should indicate that U.S. Serial no. 08/828,683 filed March 31, 1997 is now U.S. Patent No. 6,469,144.

The description of the figures on page 11 (in particular Figures 1-2, 3, 5-6) in which sequences are referenced is incomplete for improper disclosure of amino acid sequences without inclusion of a sequence identifier (i.e., SEQ ID NO:). Thus, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825. This definition sets forth limits, in terms of numbers of amino acids and/or numbers of nucleotides, at or above which compliance with the sequence rules is required. Amino acid sequences as used in 37 CFR 1.821 through 1.825 are interpreted to mean an unbranched sequence of four or more amino acids.

Thus, applicant should amend the specification to insert the appropriate sequence identifier of each referred to sequence. If these sequences have *not* been previously disclosed in a CRF, applicant must provide a computer readable form (CRF) of the sequence listing, an initial or substitute paper copy of the sequence listing, as well as any amendment directing its entry into the specification, and a statement that the content of the paper and computer readable

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copies are the same and, where applicable, include no new matter, as required by 37 CFR

1.821(e-f) or 1.825(b) or 1.825(d). *Failure to supply the appropriate sequences identification numbers in response to this action will be considered non-responsive.*

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The claim is drawn to a process of using a nucleic acid molecule encoding Apo-3 to effect production of Apo-3. It is not distinctly clear how using the nucleic acid will “effect production”. Thus, there appears to be a step missing. The rejection can be obviated by amending the claim to a process of producing an Apo-3 polypeptide comprising culturing the host cell of Claim 38 and isolating said polypeptide.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 34 is rejected under 35 USC 112, first paragraph, as the specification does not contain a written description of the claimed invention. The limitation of isolated nucleic acid

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encoding Apo-3 polypeptide comprising amino acid residues **25-417** has no clear support in the specification and the claims as originally filed. Hence, this is a new matter rejection. Applicant should cancel this terminology or submit evidence pointing to the serial number, page and line where support can be found for the disputed terminology.

Claims 34, and 36-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The written description in this case only sets forth an isolated nucleic acid encoding Apo-3 polypeptide comprising amino acid residues 1 to 417, 25 to 198, or 338 to 417 of SEQ ID NO:6. Therefore the written description is not commensurate in scope with the claims inclusive of isolated nucleic acids encoding "a biologically active variant thereof".

To provide adequate written description and evidence of possession of a claimed genus, the specification must provide sufficient distinguishing identifying characteristics of the genus. The factors to be considered include disclosure of complete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, methods of making the claimed product, or any combination thereof. In this case, no such factors are attributed to the claimed variant. Further, there is no identification of any particular portion of the variant that must be conserved. Accordingly, in the absence of sufficient recitation of distinguishing identifying characteristics, the specification does not provide adequate written description of the claimed genus.

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*Vas-Cath Inc. v. Mahurkar*, 19USPQ2d 1111, clearly states “applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of *the invention*. The invention is, for purposes of the ‘written description’ inquiry, *whatever is now claimed*.” (See page 1117.) The specification does not “clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed.” (See *Vas-Cath* at page 1116). As discussed above, the skilled artisan cannot envision the detailed chemical structure of nucleic acids encoding the encompassed genus of variant polypeptides, and therefore conception is not achieved until reduction to practice has occurred, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method of isolating it. The compound itself is required. See *Fiers v. Revel*, 25 USPQ2d 1601 at 1606 (CAFC 1993) and *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 18 USPQ2d 1016.

One cannot describe what one has not conceived. See *Fiddes v. Baird*, 30 USPQ2d 1481 at 1483. In *Fiddes*, claims directed to mammalian FGF’s were found to be unpatentable due to lack of written description for that broad class. The specification provided only the bovine sequence.

Therefore, only isolated nucleic acid encoding Apo-3 polypeptide comprising amino acid residues 1 to 417, 25 to 198, or 338 to 417 of SEQ ID NO:6, but not the full breadth of the claim meets the written description provision of 35 U.S.C. §112, first paragraph. Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 U.S.C. §112 is severable from its enablement provision (see page 1115).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 34, 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Yu *et al.*

(US Patent No. 6,153,402; *earliest priority date is March 12, 1996*; IDS #25 and #26).

Yu *et al.* teach an isolated nucleic acid encoding amino acid residues 25-198 (see attached sequence comparison; also see page 67 of US Provisional 60/013,285 beginning at amino acid position No. 36). Yu *et al.* further teach vectors, host cells, and a process of using said host cells to effect production of the polypeptide comprising culturing the host cell (page 5, 2<sup>nd</sup> paragraph, of 60/013,285).

Claims 34, and 36-39 are also rejected under 35 U.S.C. 102(e) as being anticipated by Feldmann *et al.* (US Patent No. 5633145; *earliest priority date is May 30, 1993*)

Feldmann *et al.* teach an isolated nucleic acid encoding a biologically active variant polypeptide. (see attached sequence comparison; isolated DNA encoding the variant polypeptide is 39% similar to SEQ ID NO:6). Feldmann *et al.* further teach recombinant expression of biologically active variant polypeptides via host cells transfected with vectors (column 5).

No claim is allowed.

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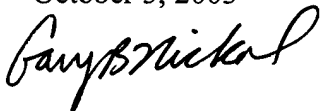
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary B. Nickol Ph.D. whose telephone number is 703-305-7143. The examiner can normally be reached on M-F, 8:30-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Gary B. Nickol, Ph.D.  
Examiner  
Art Unit 1642

GBN  
October 3, 2003

A handwritten signature in cursive script, appearing to read "Gary B. Nickol".

GenCore version 5.1.4.p5.4578  
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OM protein - nucleic search, using frame\_plus\_p2n model

Run on: April 6, 2003, 16:28:24 ; Search time 29.3732 Seconds  
(without alignments)  
1816.682 Million cell updates/sec

Title: US-09-993-234-6\_COPY\_25\_198  
Perfect score: 1038  
Sequence: 1 OGTFRSPRCDCAGDFHKKIG.....CPTSTLASCPCRCACVCGMR 174

Scoring table: BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 441362 seqs, 153338381 residues  
Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:  
-MODE=frame+g2n.model -DEV=xlh  
-O=/cgnt2.1/USPTO\_SPOOL/US0993234/runat\_27032003\_115457\_15378/app\_query.fasta.1.2346  
-DB-Issued\_Patents\_NA -QEXT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=Diosum62 -TRANS=human40.cdi  
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-WARN\_TIMEROUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -Fgapop=6 -Fgapext=7  
-YGAPOP=10 -YGAPEXT=0.5 -DELop=6 -DELext=7

Database :

- Issued\_Patents\_NA:\*
- 1: /cgnt2.6/ptodata/1/lna/5A.COMB.seq:\*
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  - 3: /cgnt2.6/ptodata/1/lna/6A.COMB.seq:\*
  - 4: /cgnt2.6/ptodata/1/lna/6B.COMB.seq:\*
  - 5: /cgnt2.6/ptodata/1/lna/PCTUS.COMB.seq:\*
  - 6: /cgnt2.6/ptodata/1/lna/Backfiles1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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1	1038	100.0	1254	3	US-08-815-469-3 Sequence 3, Appl
2	1038	100.0	1634	4	US-08-928-069-11 Sequence 11, Appl
3	1038	100.0	1634	4	US-08-828-683A-9 Sequence 9, Appl
4	1038	100.0	1783	3	US-08-815-469-1 Sequence 1, Appl
5	950	91.5	1438	4	US-08-928-069-5 Sequence 5, Appl
6	950	91.5	1438	4	US-08-928-683A-5 Sequence 5, Appl
7	666	64.2	433	4	US-08-828-683A-2 Sequence 2, Appl
8	666	64.2	433	4	US-08-828-683A-2 Sequence 2, Appl
9	212.5	20.5	1049	4	US-08-804-166-1 Sequence 1, Appl
10	212.5	20.5	1049	4	US-08-810-991-1 Sequence 1, Appl
11	211	20.3	1956	4	US-08-762-308-10 Sequence 10, Appl
12	205.5	19.8	1301	4	US-08-804-166-7 Sequence 7, Appl

13	205.5	19.8	1301	4	US-08-910-991-7 Sequence 7, Appl
14	205	19.7	600	1	US-08-050-3198-47 Sequence 47, Appl
15	205	19.7	600	2	US-08-465-982-47 Sequence 47, Appl
16	203.5	19.6	1202	4	US-08-804-166-3 Sequence 3, Appl
17	203.5	19.6	1202	4	US-08-910-991-3 Sequence 3, Appl
18	203	19.6	2062	1	US-08-050-3198-24 Sequence 24, Appl
19	203	19.6	2062	2	US-08-465-982-24 Sequence 24, Appl
20	203	19.6	2161	3	US-09-106-038A-1 Sequence 1, Appl
21	203	19.6	2161	4	US-09-505-250-3 Sequence 3, Appl
22	203	19.6	2175	1	US-08-331-668-1 Sequence 1, Appl
23	203	19.6	2175	1	US-08-837-941-1 Sequence 1, Appl
24	203	19.6	2175	4	US-08-126-016-1 Sequence 1, Appl
25	203	19.6	2175	4	US-08-054-970-1 Sequence 1, Appl
26	203	19.6	6889	5	US-08-286-740-2 Sequence 2, Appl
27	203	19.6	6889	5	PCT-US95-09576-2 Sequence 2, Appl
28	203	19.6	6896	2	US-08-627-151A-6 Sequence 6, Appl
29	201	19.4	1147	4	US-08-804-166-5 Sequence 5, Appl
30	201	19.4	1147	4	US-08-910-991-5 Sequence 5, Appl
31	200.5	19.3	483	4	US-09-326-354-1 Sequence 1, Appl
32	200.5	19.3	1478	4	US-09-149-922-6 Sequence 6, Appl
33	191	18.4	543	4	US-09-513-007-3 Sequence 3, Appl
34	191	18.4	2440	4	US-09-513-007-3 Sequence 3, Appl
35	190	18.3	1724	5	PCT-US96-12374-1 Sequence 1, Appl
36	189	18.2	1724	4	US-08-509-024-1 Sequence 1, Appl
37	189	18.2	1724	4	US-09-333-279-1 Sequence 1, Appl
38	182	17.5	579	4	US-09-146-950-3 Sequence 3, Appl
39	182	17.5	591	4	US-09-146-950-19 Sequence 19, Appl
40	182	17.5	1596	4	US-09-146-950-17 Sequence 17, Appl
41	182	17.5	1929	4	US-09-146-950-17 Sequence 1, Appl
42	182	17.5	4622	4	US-08-509-024-6 Sequence 6, Appl
43	182	17.5	4622	4	US-09-333-279-6 Sequence 6, Appl
44	170.5	16.4	477	1	US-08-050-3198-53 Sequence 53, Appl
45	170.5	16.4	477	2	US-08-465-982-53 Sequence 53, Appl

#### ALIGNMENTS

RESULT 1  
US-08-815-469-3  
Sequence 3, Application US/08815469  
Patent No. 6153402  
GENERAL INFORMATION:  
APPLICANT: YU, Guo-Liang  
APPLICANT: NI, Jian  
APPLICANT: Dixit, Vashya  
APPLICANT: Gentz, Reiner L.  
APPLICANT: Dillon, Patrick J.  
TITLE OF INVENTION: Death Domain Containing Receptors  
NUMBER OF SEQUENCES: 17  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sterne, Kessler, Goldstein & Fox, P.L.L.C.  
STREET: 1100 New York Ave., NW, Suite 600  
CITY: Washington  
STATE: DC  
COUNTRY: USA  
ZIP: 20005-3934  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/815,469  
FILING DATE: HERWITH  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 6153402 yet Assigned  
FILING DATE: 06-FEB-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/028,711  
FILING DATE: 17-OCT-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 60/013,285

```

?      FILING DATE: 12-MAR-1996
?      ATTORNEY/AGENT INFORMATION:
?      NAME: Steffe, Eric K.
?      REGISTRATION NUMBER: 36,688
?      REFERENCE/DOCKET NUMBER: 1488.0310003/EKS/KRM
?      TELECOMMUNICATION INFORMATION:
?      TELEPHONE: 202-371-2600.
?      TELEFAX: 202-371-2540
?      INFORMATION FOR SEQ ID NO: 3:
?      SEQUENCE CHARACTERISTICS:
?      LENGTH: 1254 base pairs
?      TYPE: nucleic acid
?      STANDARDS: double
?      TOPOLOGY: both
?      MOLECULE TYPE: DNA
?      FEATURE:
?      NAME/KEY: CDS
?      LOCATION: 1..1251
?      US-08-815-469-3

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Score:      1038.00      Matches:      174
Percent Similarity:      100.00%      Conservative: 0
Best local Similarity:      100.00%      Mismatches: 0
Query Match:      100.00%      Indels:      0
DB:      3      Gaps:      0

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US-09-993-234-6\_COPY\_25\_198 (1-174) x US-08-815-469-3 (1-1254)

OY	1	GlnGlnGlyThrArgSerProArgCysAspCysValAlaGlyAspPheHisIstyLysIleGly	20
Db	73	CAGGGCGGCACTCGTAGGCCCCAGAGGTGACGTGCGGTACTCTCCACAGAAAGATTGCT	133
OY	21	LeuPheCysCysValGlyCysProAlaGlyHisIstyLeuIstyLysAlaProCysThrGluPro	40
Db	133	CTGTTTTCGACAGAGGCTGCCACGGGGGACACTACCGAAGGGCCCTTGACACGGAGCCC	192
OY	41	CysGlyAsnSerThrCysLeuValCysProGlnAspThrPheLeuAlaTrpGluAsnHis	60
Db	193	TGGCGCAACTCCACTGCTGCTGTGTGTCCCAAGACACTTCTTGCGCTGGAGAAACAC	255
OY	61	HisAsnSerGluCysAlaArgCysGlnAlaCysAspGluGlnAlaSerGlnValAlaLeu	80
Db	253	CATTATTGTGAATGTGCCCGGTGCCAGGCGCTGTGATGAGCAGGCGCTCCAGATGGCGCTG	312
OY	81	GluAsnCysSerAlaValAlaAspThrArgGlyGlyCysLysProGlyTyrPheValGlu	100
Db	313	GAGAACTGTTACAGCATGTGGCCGACACCGGCTGTGTGCTTAAGCCAGGCTGTGTTGTGAG	372
OY	101	CysGlnValSerGlnCysValSerSerSerProPheTyrCysGlnProCysLeuAspCys	120
Db	373	TGCCAGGTCACCAACATGTTGACAGATTACCCCTTTCACAGCCAAACATGCTGTGAACTGC	432
OY	121	GlyAlaLeuHisAlaGlnHisThrArgLeuLeuCysSerArgTrpArgAspThrAspCysGlyThr	140
Db	433	GGGGCCCTGCACCCGCCACACAGGCTACTGTCTCCGCGAAGATGATGACTGTGGGACC	492
OY	141	CysLeuProGlyPheTyrGluHisGlyAspIleCysValSerCysProTrpSerThrLeu	160
Db	493	TGCCTGCCTGCTCTATTAGAACATGGGAGATGGTGGCTGTACTCTCCCAAGAGACCCCTG	552
OY	161	GlySerCysProGluIstyArgCysAlaAlaValCysGlyTyrParg	174
Db	553	GGGAGCTGTCCAGACCGCTGTGGCGGTCTGTGTGGCTGGAG	594

RESULT 2  
US-08-928-069-11  
Sequence 11, Application US/08928069  
Patent No. 6462176  
GENERAL INFORMATION:  
APPLICANT: Ashkenazi, Avi J.  
TITLE OF INVENTION: Apo-3 POLYPEP

```

1 NUMBER OF SEQUENCES: 15
2 CORRESPONDENCE ADDRESS:
3 ADDRESSEE: Genentech, Inc.
4 STREET: 1 DNA Way
5 CITY: South San Francisco
6 STATE: California
7 COUNTRY: USA
8 ZIP: 94080
9
10 COMPUTER READABLE FORM:
11 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
12 COMPETER: IBM PC compatible
13 OPERATING SYSTEM: PC-DOS/MS-DOS
14 SOFTWARE: Winpatlin (Genentech)
15
16 CURRENT APPLICATION DATA:
17 APPLICATION NUMBER: US/08/928,069
18 FILING DATE: 11-Sep-1997
19 CLASSIFICATION: 435
20
21 PRIOR APPLICATION DATA:
22 APPLICATION NUMBER: 60/026943
23 FILING DATE: 09/23/1996
24
25 ATTORNEY/AGENT INFORMATION:
26 NAME: Marschang, Diane L.
27 REGISTRATION NUMBER: 35,600
28 REFERENCE/DOCKET NUMBER: P1052R1
29
30 TELECOMMUNICATION INFORMATION:
31 TELEPHONE: 650/225-5416
32 TELEFAX: 650/952-9881
33
34 INFORMATION FOR SEQ ID NO: 11:
35 SEQUENCE CHARACTERISTICS:
36 LENGTH: 1634 base pairs
37 TYPE: Nucleic Acid
38 STRANDEDNESS: Single
39 TOPOLOGY: Linear
40
41 US-08-928-069-11

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Alignment Scores:	
Pred. No.:	4,578-86
Score:	1038.00
Percent Similarity:	100.00%
Best Local Similarity:	100.00%
Query Match:	100.00%
DB:	4
Gaps:	0
Length:	1634
Matches:	174
Mismatches:	0
Indels:	0
Gaps:	0

US-09-993-234-6\_COPY\_25\_198 (1-174) x US-08-928-069-11 (1-1634)

QY	1	GlnGlnGlyGlyThrArgSerProArgCysAspCysAlaGlyAspPheHisLysLysIleGly	20
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QY	21	LeuPheCysCysValArgGlyCysProAlaGlyHisIsthrLeuLysAlaProCysThrGluPro	40
Db	221	CTGTATTGTGTTCAAGAGGCTGCCAGCGGGGCACTAACCTGAAGGCCCTTCACAGGAGCC	280
QY	41	CysGlyIasnSerThrCysIleuValCysProGlnAspPheLeuAlaTrpGluAsnHis	60
Db	281	TGCGGCAACTCCACCTGCTGTGTGTGTCCCAACACACTTCTTGCGCTGGGGAACACAC	340
QY	61	HisAsnSerGluCysAlaArgCysGlnAlaCysAspGluGlnAlaSerGlnValAlaAla	80
Db	341	CATATTCTGAAATGTGCCCGCTGCCAGGCTGTGATATAGCAAGGCTTCCACAGGTGGCGGTG	400
QY	81	GluAsnCysSerAlaValAlaAspPheArgCysGlyCysLysPProGlyThrPheValGlu	100
Db	401	GAGAACTGTTCAGCAGATGGCGGACACCCGCTGTGGCTGTAAAGCCAGGCTGGTTGTGGAG	460
QY	101	CysGlnValSerGlnCysValSerSerSerProPheThrCysGlnProCysLeuAspCys	120
Db	461	TGCCAGGTCACCAATGATGTGTGAGAGTTACACCTTCTTACTGACCAACATGCTTACAGCTGC	520
QY	121	GlyAlaIleuHisArgHisIsthrArgLeuLeuCysSerArgArgAspPheAspCysGlyThr	140
Db	521	GGGGCGCTGCACCGCACACAGGGCTACTGTCTTCCGCGAAGATATCTGACTCTGGGAC	580

QY 334 GlnLeuTyrAspValMetAspAlaValProAlaArgArgTrrPylGluPheValArgThr 353  
 Db 1413 ACCCTGTAGCGGTGGTGGAGCGCGCGCCCGCTGCGGTGAGAGAGATTGGCGCGG 1472  
 QY 354 LeuGlyLeuArgGluAlaGluIleGluAlaValGluAlaGluIleGlyArg---PheArg 372  
 Db 1473 CTGGGACTAGGAGACACAGATCGAGCGCTGGAGCTGGAGACGGGCGCCACCTGCGC 1532  
 QY 373 AspGlnGlnTyrGluMetLeuLysArgTrrPargGlnGlnGlnPro-----AlaGly 389  
 Db 1533 GAGGGGCAATACAGATGCTGGCGGCGCTGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 1592  
 QY 390 LeuGlyAlaValTyrAlaAlaLeuGluArgMetGlyLeuAspGlyCysValGluAspLeu 409  
 Db 1593 CTGGAGCTCTGCGCGCGCTGCTCAGGAGACATGAGACTGCTGGTGGTCTCGAAGACATA 1652  
 QY 410 ArgSerArgLeu 413  
 Db 1653 GAGGAGCGCGT 1664

LT 11

8-050-319B-24  
 Sequence 24, Application US/08050319B

Patent No. 5633145  
 GENERAL INFORMATION:  
 APPLICANT: M. Feldmann, P.W. Gray,  
 APPLICANT: M.J.C. Turner, F.M. Brennan  
 TITLE OF INVENTION: Modified human TNFalpha (Tumor  
 NUMBER OF SEQUENCES: 57  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Reed & Robbins  
 STREET: 635 Bryant Street  
 CITY: Palo Alto  
 STATE: California  
 COUNTRY: USA

ZIP: 94301  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent Release #1.0, version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/050,319B  
 FILING DATE: 10-May-1993  
 CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:  
 NAME: Robbins, Roberta L.  
 REGISTRATION NUMBER: 33,208  
 REFERENCE/DOCKET NUMBER: 5150-0030  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 617-8999  
 TELEFAX: (415) 327-3231  
 INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:  
 LENGTH: 2062 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA

FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 155..1519  
 US-08-050-319B-24

Alignment Scores:  
 Pred.: 1,366-21  
 Score: 376.00  
 Percent Similarity: 39.09%  
 Best Local Similarity: 28.29%  
 Query Match: 16.19%  
 Db: 1  
 Gaps: 22

US-09-993-234-6 (1-417) x US-08-050-319B-24 (1-2062)  
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 Db 197 CTCCTGAGACCTTGTGTGGAAATATACCCCTCAGGGGTTATTGAGCTGCTCCTACCTA 256  
 QY 27 GlyThrArgSerProArg-----CysAspCysAlaGlyAspPheHisLysLys 43  
 Db 257 GGGGACAGGAGAGAGAGATAGTGTGTGTGTCGCCAAGGAAATATATTCACCCCTCAAAAT 316  
 QY 44 GlyLeuPheCysCysArgGlyCysProAlaGlyHisTyrLeuLysAlaProCysThrGlu 63  
 Db 317 AATTGATTTGCTGTACCAAGTCCCAAGAACCTACTTGTACAAATGACTGTCCAGGC 376  
 QY 64 ProCysGlyAsnSerThrCysLeuValCysProGlnAspThrPheLeuAlaTrpLeuAsn 83  
 Db 377 CCGGGGACAGATACGAGCTGAGGAGTGTGAGAGCGGCTCTTACCGCTTCAGAAAC 436  
 QY 84 HisHisAsnSerGluCysAlaArgCysGlnAlaCysAspGluGlnAlaSerGlnValAla 103  
 Db 437 CACCTCAGA---CACTGCTCAGCTGCTCCTCAATCCGAAAGAAATGGTCCAGTGGAG 493  
 QY 104 LeuGluAsnCysSerAlaValAlaAspThrArgCysGlyCysLysProGlyTrrPheVal 123  
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 QY 124 GluCys-----GlnValSerGlnCysValSerSerProPheTyrCysGlnPro 140  
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 QY 141 CysLeuAspCysGlyAlaLeuHisArgHisThrArgLeuCysSerArgArgAspThr 160  
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 QY 161 AspCysGlyThrCysLeuProGlyPheTyrGluHisGlyAspGlyCysValSerCysPro 180  
 Db 644 ACCGTGTGACCTGCCAGCAGTTTCCTTCAAGAGAAAGAGTGTCTCTCTCTCTCTCTCT 700  
 QY 181 ThrSerThrLeuGlySerCysProGlu-----ArgCysAlaAlaValCys----- 195  
 Db 701 -----AGTAACTGTAAAGAAAGCCGTGGAGTGCACCAATTTGCTTACCCTCAG 748  
 QY 196 -----GlyTrrArgGlnMetPheTrrPylGlnValLeu 206  
 Db 749 ATTGAATATGTAAGGAGCTAGGAGCTAGGAGCTAGGAGCTAGGAGCTAGGAGCTAGGAGCT 808  
 QY 207 LeuAlaGlyLeuValValProLeuLeuLeuGlyAlaThrLeuThrTyrThrTyrArgHis 226  
 Db 809 TTTCTTGGTTCCTTGTATCCCTCTTCATTTGTTAAATGATATCCGTAACCAACGG 868  
 QY 227 CysTrrProHisLys-----ProLeuValThrAlaAspGluAla 239  
 Db 869 ---TGAAGTCCAGCTTCTACTCATTGTTGTGGGAAATGCACACCTGMAAAAGAGGG 925  
 QY 240 GlyMetGluAlaLeuThrProProProAlaThrHisLeuSerProLeuAspSer----- 257  
 Db 926 GAGCTTGAAGAACTACTAAGTAAAGCC-----CTGGCCCAACCAAGCTTCACT 976  
 QY 258 -----AlaHisThrLeuAlaProProAspSerSerGlyLysLys 272  
 Db 977 CCCACTCAGGCTTACCCCGGCTTACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1036  
 QY 273 ThrValGlnLeuValGlyAsnSerThrProGlyTyrProGluThrGlnGluAlaLeu 292  
 Db 1037 TCC-----AGTCCACCTATACCCCGGTGAC----- 1063  
 QY 293 CysProGlnValThrTrrSerTrrPaspGlnLeuProSerArgAlaLeuGlyPro----- 310  
 Db 1064 TGTCCCACTTTCGCG-----GCTCCCGGAGAGAGGTGACACCACTAT 1108  
 QY 311 -----AlaAlaAlaProThrLeuSerPro--- 318  
 Db 1109 CAGGGGGCTGACCCCATCTTTCGACAGGCTTGTGCTGCTGCTGCTGCTGCTGCTGCTT 1168

